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Express Mail Label No.: EV 533193418 US**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**Applicant(s): **Timothy J. Guzi et al.**

: Group Art Unit: To Be Assigned

Serial No.: **10/776,988**

: Examiner: To Be Assigned

Filed: **02/11/2004**

: Attorney Docket No. : OC01617K1

For: **NOVEL PYRAZOLOPYRIMIDINES AS
CYCLIN DEPENDENT KINASE INHIBITORS**

X

**INFORMATION DISCLOSURE STATEMENT AND
SUBMISSION OF INTERNATIONAL SEARCH REPORT**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to Rule 56, it is requested that the documents listed on the accompanying PTO-1449 Form be considered and made of record in the above-identified patent application. Copy(ies) of these references ☒ are attached ☐ were filed in related application U.S. Serial No(s) _____ filed _____, respectively.

(b) No fee is believed due because:

- ☐ This Information Disclosure Statement is being filed within three (3) months of the filing date of the application.
- ☐ This Information Disclosure Statement is being concurrently filed with the above-identified application.
- ☐ This Information Disclosure Statement is being concurrently filed with a Request for Continued Examination (RCE).
- ☒ This Information Disclosure Statement is being filed prior to the mailing of a first Office Action on the merits.

(c) ☐ This Information Disclosure Statement is being filed before the mailing date of any final action, notice of allowance or an action that otherwise closes prosecution; and

☐ Each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or

☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement; or

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- (d) ☐ This Information Disclosure Statement is being filed on or before the payment of the issue fee; and
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- ☐ The Commissioner is hereby authorized to charge the requisite fee listed on the attached Fee Transmittal Sheet.
- ☒ The Commissioner is hereby authorized to charge any additional fees which may be required for this Information Disclosure Statement, or credit any overpayment to Deposit Account No. 19-0365, Patent Case No. OC01617K1.

Respectfully submitted,
SCHERING-PLOUGH CORPORATION



By:

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/776,988
	Filing Date	02/11/2004
	First Named Inventor	Timothy J. Guzi
	Art Unit	To Be Assigned
	Examiner Name	To Be Assigned
Total Number of Pages in This Submission	Attorney Docket Number	OC01617K1

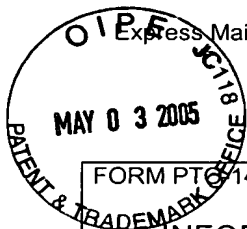
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<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name			
Signature			
Printed name	Palaiyur S. Kalyanaraman		
Date	05/02/2005	Reg. No.	34,634

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Sheet 1 of 2

FORM PT 61449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.:

OC01617K1

APPLICATION NO.:

10/776,988

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

(Use several sheets if necessary)

APPLICANT:

Timothy J. Guzi et al.

FILING DATE:

02/11/2004

GROUP:

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AA	5,571,813	11/05/1996	Rühter et al.			
	AB	5,602,136	02/11/1997	Rühter et al.			
	AC	5,602,137	02/11/1997	Rühter et al.			
	AD	5,688,949	11/18/1997	Inoue et al.			
	AE	5,707,997	01/13/1998	Shoji et al.			
	AF	5,919,815	07/06/1999	Bradley et al.			
	AG	6,040,321	03/21/2000	Kim et al.			
	AH	6,107,305	08/22/2000	Misra et al.			
	AI	6,191,131	02/20/2001	He et al.			
	AJ	6,262,096	07/17/2001	Kim et al.			
	AK	6,413,974	07/02/2002	Dumont et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES	NO
	AL	DE 102 23 917 A1	11/12/2003	Germany				
	AM	EP 0 628 559	04/03/2002	Europe				
	AN	EP 1 334 973	08/13/2003	Europe				
	AO	WO 02/22610	03/21/2002	PCT				
	AP	WO 02/40485	05/23/2002	PCT				
	AQ	WO 02/50079	06/27/2002	PCT				
	AR	WO 03/091256 A1	11/06/2003	PCT				
	AS	WO 95/35298	12/28/1995	PCT				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	AT	Vesely et al., "Inhibition of Cyclin-Dependent Kinases by Purine Analogues", <i>Eur. J. Biochem</i> (1994), 224 : 771-786.
	AU	Kim et al., "Discovery of Aminothiazole Inhibitors of Cyclin-Dependent Kinase 2: Synthesis, X-ray Crystallographic Analysis, and Biological Activities", <i>Journal of Medical Chemistry</i> , (2002), 45 : 3905-3927.
	AV	Mettey et al., "Aloisines, a New Family of CDK/GSK-3 Inhibitors. SAR Study, Crystal Structure in Complex with CDK2, Enzyme Selectivity, and Cellular Effects", <i>J. Med. Chem.</i> (2003), 46 (2): 222-236.
	AW	Novinson et al., "Synthesis and Antifungal Properties of Certain 7-Alkylaminopyrazolo[1,5-a]pyrimidines", <i>J. Med. Chem.</i> (1977), 20 (2): 296-299.
	AX	Senderowicz et al., "Phase I Trial of Continuous Infusion Flavopiridol, a Novel Cyclin-Dependent Kinase Inhibitor, in Patients with Refractory Neoplasms", <i>Journal of Clinical Oncology</i> (September 1998), 16 (9): 2986-2999.
	AY	Meijer et al., "Biochemical and Cellular Effects of Roscovitine, a Potent and Selective Inhibitor of the Cyclin-Dependent Kinases CDC2, CDK2 and CDK5", <i>Eur. J. Biochem.</i> (1997), 243 :527-536.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO.: OC01617K1	APPLICATION NO.: 10/776,988
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use several sheets if necessary)</i>				APPLICANT: Timothy J. Guzi et al.	
				FILING DATE: 02/22/2004	GROUP:
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)					
	AZ	Bible et al., "Cytotoxic Synergy Between Flavopiridol (NSC 649890, L86-8275) and Various Antineoplastic Agents: The Importance of Sequence of Administration", <i>Cancer Research</i> (August 15, 1997), 57 : 3375-3380.			
	BA	Shiota et al., "Synthesis and Structure-Activity Relationship of a New Series of Potent Angiotensin II Receptor Antagonists: Pyrazolo[1,5- α]pyrimidine Derivatives", <i>Chem. Pharm. Bull.</i> (1999), 47 (7): 928-938.			
	BB	Translation of WO 03/91256, <i>A Rising Sun Communications Ltd. Translation Product</i> , (1-62)			
	BC	Yasuo Makisumi, "Studies on the Azaindolizine Compounds. XI. Synthesis of 6,7-Disubstituted Pyrazolo[1,5- α]pyrimidines.", <i>Chem. Pharm. Bull.</i> (1962), 10 : 620-626.			
	BD	Cai et al., "5-(N-Oxyaza)-7-substituted-1,4-dihydroquinoxaline-2,3-diones: Novel, Systemically Active and Broad Spectrum Antagonists for NMDA/glycine, AMPA, and Kainate Receptors", <i>J. Med. Chem.</i> (1997), 40 :3679-3686.			
	BE	Bruce L. Finkelstein, "Regioselective Lithiation and Reaction of [1,2,4]Triazolo[1,5- α]pyridine and Pyrazolo[1,5- α]pyridine", <i>J. Org. Chem.</i> , (1992), 57 : 5538-5540.			
	BF	Ongkeko et al., "Inactivation of Cdc2 increases the level of apoptosis induced by DNA damage", <i>Journal of Cell Science</i> (1995), 108 : 2897-2904.			
	BG	Shiota et al., "Regioselective Reactions of Organozinc Reagents with 2,4-Dichloroquinoline and 5,7-Dichloropyrazolo[1,5- α]pyrimidine", <i>J. Org. Chem.</i> (1999), 64 : 453-457.			
	BH	Novinson et al., "Synthesis and Antimicrobial Activity of Some Novel Heterocycles. Azolo- α s-triazines ¹ ", <i>Journal of Medicinal Chemistry</i> , (1976), 19 (4): 517-520.			
	BI				
EXAMINER			DATE CONSIDERED		
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